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- 1. A method for controlling a power amplifier in a power amplifier system, said power amplifier system including a loop by which a parameter proportional to output power of the power amplifier is sensed and fed to an error amplifier, and the output of the error amplifier is fed
- to a control input of the power amplifier as a control signal, the method comprising adding an extra gain to the loop.
  - 2. The method according to Claim 1, wherein said extra gain is proportional to said control signal.
  - 3. The method according to Claim 2, wherein said parameter proportional to output power comprises current.
- 4. The method according to Claim 1 wherein said extra gain maintains said loop in an active state at all times.
  - 5. The method according to Claim 1, wherein said power amplifier system is utilized in a mobile terminal of a wireless communications system.
- The method according to Claim 5, wherein said mobile terminal is a cellular telephone.

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- 7. The method according to Claim 5, wherein said wireless communications system operates in accordance with GSM specifications.
  - 8. A power amplifier system comprising:
- 5 a power amplifier for amplifying a signal;

a control circuit for controlling said power amplifier, said control circuit including a loop for sensing a parameter proportional to output power of said power amplifier and feeding it back to an error amplifier, the output of which is fed to a control input of said power amplifier as a control signal; and

said control circuit further including circuitry for adding extra gain to said loop.

- 9. The power amplifier system according to Claim 8, wherein said extra gain is proportional to said control signal.
- 15 10. The power amplifier system according to Claim 9, wherein said parameter comprises current.
  - 11. The power amplifier system according to Claim 10, wherein said system is incorporated in a mobile terminal of a wireless communications system.

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